



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

# AMERICAN Journal of Mathematics

---

EDITED BY

**FRANK MORLEY**

WITH THE COOPERATION OF

**SIMON NEWCOMB**

A. COHEN, CHARLOTTE A. SCOTT

AND OTHER MATHEMATICIANS

PUBLISHED UNDER THE AUSPICES OF THE JOHNS HOPKINS UNIVERSITY

*Πραγμάτων ἔλεγχος οὐ βλεπομένων*

VOLUME XXX

BALTIMORE: THE JOHNS HOPKINS PRESS

LEMCKE & BUECHNER, *New York.*

G. E. STECHERT & CO., *New York.*

D. VAN NOSTRAND CO., *New York.*

E. STEIGER & CO., *New York.*

KEGAN PAUL, TRENCH, TRÜBNER & CO., *London.*

GAUTHIER-VILLARS, *Paris.*

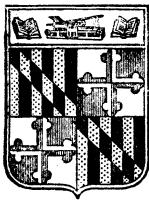
A. HERMANN, *Paris.*

MAYER & MÜLLER, *Berlin.*

KARL J. TRÜBNER, *Strassburg.*

ULRICO HOEPLI, *Milan.*

1908



The Lord Baltimore Press  
BALTIMORE, MD., U. S. A.

# INDEX.

---

BERRY, ARTHUR. On Elliptic Modular Equations for Transformations of Orders 29, 31, 37, . . . . .	156
BOLZA, OSKAR. The Determination of the Conjugate Points for Discontinuous Solutions in the Calculus of Variations, . . . . .	209
BUTTS, WILLIAM H. The Elliptic Cylinder Function of Class K, . . . . .	129
CARMICHAEL, R. D. A Table of the Values of $m$ Corresponding to Given Values of $\phi(m)$ , . . . . .	394
DICKSON, L. E. On the Canonical Forms and Automorphs of Ternary Cubic Forms, .	117
DICKSON, LEONARD EUGENE. Invariantive Reduction of Quadratic Forms in the $GF[2^n]$ , . . . . .	263
EIESLAND, JOHN. On Translation-Surfaces Connected with a Unicursal Quartic, .	170
EISENHART, LUTHER PFAHLER. Surfaces with the same Spherical Representation of their Lines of Curvature as Spherical Surfaces, . . . . .	19
LASKER, E. A New Method in Geometry, . . . . .	65
LEONARD, HEMAN BURR. On the Factoring of Composite Hypercomplex Number Systems, . . . . .	43
LOVETT, EDGAR ODELL. On a Group of Transformations which Occurs in the Problem of Several Bodies, . . . . .	307
MACMILLAN, WILLIAM DUNCAN. The Motion of a Particle Attracted Towards a Fixed Center by a Force Varying Inversely as the Fifth Power of the Distance, . . . . .	282
MILLER, G. A. Groups Generated by $n$ Operators Each of Which is the Product of the $n-1$ Remaining Ones, . . . . .	93
RUSSELL, BERTRAND. Mathematical Logic as Based on the Theory of Types, .	222
SISAM, C. H. Concerning Systems of Conics Lying on Cubic Quartic and Quintic Surfaces, . . . . .	99
SNYDER, VIRGIL. Plane Quintic Curves which Possess a Group of Linear Transformations, . . . . .	1
SNYDER, VIRGIL. On Birational Transformations of Curves of High Genus, .	10
SNYDER, VIRGIL. Normal Curves of Genus 6, and their Groups of Birational Transformations, . . . . .	325
SNYDER, VIRGIL. On the Range of Birational Transformation of Curves of Genus Greater than the Canonical Form, . . . . .	337
STEPHENS, R. P. On the Pentastroid, . . . . .	381
VEBLEN, OSWALD, and YOUNG, JOHN WESLEY. A Set of Assumptions for Projective Geometry, . . . . .	347